

Title (en)
PROCESS FOR DEODORIZING EDIBLE OIL

Title (de)
VERFAHREN ZUM DESODORIEREN VON SPEISEÖL

Title (fr)
PROCÉDÉ DE DÉSODORISATION D'HUILE ALIMENTAIRE

Publication
EP 2550078 A1 20130130 (DE)

Application
EP 10809139 A 20101224

Priority
• DE 102010009579 A 20100226
• DE 2010001522 W 20101224

Abstract (en)
[origin: WO2011103846A1] In a process for deodorizing edible oil by means of a semicontinuous steam distillation plant, comprising a stripping column with a plurality of separating stages which can be closed off from one another, a degassing stage upstream of the stripping column, and a downstream vapor scrubber, a vacuum generation plant connected to the degassing stage, the separating stages and the vapor scrubber, one feed line for stripping steam opening into each of the degassing stage and the separating stage, indirect heat exchange surfaces each arranged in the separating stages of the upper and lower sections of the stripping column, and a vapor outlet line which is connected to the separating stages arranged in the upper and lower sections of the stripping column and opens into the vapor scrubber, a vacuum is generated in the distillation plant and fills the degassing stage with a batch of edible oil feed which passes through the degassing stage and the separating stages in succession and is treated at the same time with stripping steam, and the batch preheated in the degassing stage is heated in the separating stages of the upper section of the stripping column to 150 to 180°C, heated in the separating stages of the middle section to 230 to 260°C, and cooled in the separating stages of the lower section to 90 to 120°C, the vapors departing from the separating stages of the upper and lower sections are scrubbed with fatty acid in the vapor scrubber and condensed to give a mixed fatty acid distillate. In order to be able to obtain a fatty acid phase rich in sterols and tocopherols and a fatty acid phase low in sterols and tocopherols separately from one another, there is indirect heating at least of the batch present in the first separating stage in flow direction in the middle section of the stripping column, said batch having condensed out of the vapors departing from the separating stages of the middle section of the stripping column in indirectly cooled form and having been fractionated selectively into a fatty acid phase rich in sterols and tocopherols and a fatty acid phase low in sterols and tocopherols.

IPC 8 full level
B01D 3/10 (2006.01); **B01D 5/00** (2006.01); **C11B 3/12** (2006.01); **C11B 3/14** (2006.01)

CPC (source: EP US)
B01D 3/10 (2013.01 - EP US); **B01D 5/006** (2013.01 - EP US); **C11B 3/12** (2013.01 - EP US); **C11B 3/14** (2013.01 - US)

Citation (search report)
See references of WO 2011103846A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
DE 102010009579 A1 20110901; **DE 102010009579 B4 20130725**; EP 2550078 A1 20130130; EP 2550078 B1 20150311; MY 156384 A 20160215; US 2013084375 A1 20130404; US 9567549 B2 20170214; WO 2011103846 A1 20110901

DOCDB simple family (application)
DE 102010009579 A 20100226; DE 2010001522 W 20101224; EP 10809139 A 20101224; MY PI2012004185 A 20101224; US 201013583112 A 20101224